# Youth Data 2000, 2002 and 2004

(HYS/WSSAHB/TABS)

# **Island County Findings**

Washington State Department of Health Tobacco Prevention & Control Program Assessment and Evaluation Team 6/15/2005

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# Youth Data 2000, 2002 and 2004

(HYS/WSSAHB/TABS)

# **Report Overview**

This report describes County level results from youth surveys conducted in Washington State Schools in 2000, 2002, and 2004. Results presented here are primarily related to tobacco prevention (youth and parent) focused efforts.

#### Where did these data come from?

All of the data presented in this report comes from anonymous self-administered questionnaires taken by 6<sup>th</sup>, 8<sup>th</sup>, 10<sup>th</sup>, 12<sup>th</sup> grade students in public schools, including:

- Washington State Survey of Adolescent Health Behaviors, Fall 2000 (WSSAHB 2000)
  - WSSAHB measured alcohol, tobacco, and other drug use (ATOD), as well as other health-related behaviors and risk and protective factors. A total of 102,532 students in 570 schools participated (including 17,870 students from 98 schools in the State sample).
- <u>Tobacco-related Adolescent Health Behavior Survey, Fall 2000 (TABS)</u> TABS primarily measured tobacco use and attitudes about tobacco. A total of 20,348 youth participated.
- <u>Health Youth Survey Pilot, Fall 2001 (HYS 2001)</u> HYS01 was a pilot survey for the new "Healthy Youth Survey" format to be implemented in 2002. A total of 6,087 youth participated.
- Healthy Youth Survey, Fall 2002 (HYS 2002)
   HYS02 was effectively a combination of the WSSAHB and the Youth Risk Behavior Survey (YRBS). Many tobacco questions (consistent with the WSSAHB 2000) were included. A total of 137,335 students in 203 districts and 752 schools participated (including 24,685 students from 171 buildings in the State sample).
- <u>Healthy Youth Survey, Fall 2004 (HYS 2004)</u>
  HYS04 was very similar to HYS02. A few tobacco questions were dropped to decrease the length of the survey. A total of 185,095 students in 235 districts and 1013 schools participated (including 30,263 students from 191 buildings in the state sample)

For more information about these surveys, visit the Department of Health's Healthy Youth Survey website: <a href="http://www3.doh.wa.gov/HYS/">http://www3.doh.wa.gov/HYS/</a>

#### **State Level Data**

In this report, the State level data presented are from the following sources:

- For the 2000 State estimates the WSSAHB 2000 State sample was used.
- For the 2002 State estimates the HYS 2002 State sample was used.
- For the 2004 State estimates the HYS 2004 State sample was used

# **County Level Data**

In this report, the County level data presented are from the following sources:

- For the 2000 County estimates, more than one survey (WSSAHB 2000, TABS and/or HYS01) were sometimes used in a County and data were combined to give the best estimates in Counties where this applied. County samples were drawn for larger counties in both the WSSAHB 2000 and TABS. If a County was sampled, only the respondents in the county sampled schools are included in the County results. If a County was not sampled, all respondents from that county are included in the County results.
- For the 2002 County estimates the HYS 2002 was used. County samples were drawn for large counties. If a County was sampled, only the respondents in the county sampled schools are included in the County results. If a County was not sampled, all respondents from that county are included in the County results.
- For the 2004 County estimates the HYS 2004 was used. County samples were drawn for large counties. If a County was sampled, only the respondents in the county sampled schools are included in the County results. If a County was not sampled, all respondents from that county are included in the County results.

# **Missing Data**

Not all data presented in this report were available for all grades. The following are reasons why data may be missing:

- Some survey questions were not asked of 6<sup>th</sup> graders in 2000, 2002 or 2004. When data are missing for this reason, County and State trends are not included, bars and lines are excluded from charts and tables are marked with an "\*".
- Some survey questions were asked in 2000 but not on all three surveys that contribute to the 2000 County level data (WSSAHB 2000, TABS 2000, HYS01). In these cases State level results are available, but County trends are not included, bars are excluded from the charts and tables are marked with an "\*".
- County level estimates were only reported in this report if the survey response rate was least 40%. Estimates from Counties with below 40% response rate may not be generalizable to the County. When data are missing for this reason, County trends are not included, bars are excluded from charts, and tables are marked with "\*".

• On the WSSAHB 2000, two measures in this report (exposure to secondhand smoke in home/car and community prevalence of smoking) were on the optional section of the survey. Data for these measures are not available for counties who chose to "tear-off" this portion of the survey. The use of the tear-off questions was variable among Counties so County trends are not included, bars are excluded from graphs, and tables are marked with an "\*".

#### Limitations

- All five of these surveys only represent students who attend public school.
- School-based surveys may underestimate risk behaviors associated with youth who drop out of school or do not attend school.
- Youth who read poorly may have difficulty comprehending or finishing the survey. These youth may also be at risk for other difficulties, thus, the survey may be an underestimate.

#### What should I look for?

When looking at your data, you can view it from the following perspectives:

- Are we doing better or worse than we were?
- Are we doing better or worse than the State right now?
- Are we changing over time?
- Are our changes over time similar or different from the State changes over time.
- Are we "OK" or "not OK", period.

It is important to note that this report is NOT an evaluation of your program. You can use these findings to think about whether your program is currently effective, or where improvement is needed, by considering these data <u>as well as</u> data from other sources and with input from your community stakeholders.

# How should I compare results?

In this report data are provided graphically in charts and numerically in tables.

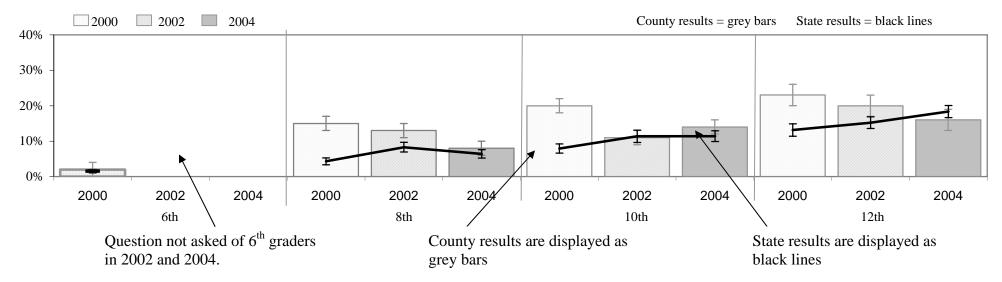
### **Charts:**

County and State trend data are provided in a chart for 2000, 2002 and 2004 when data are available. Trend data can be used to determine if your County is doing better or worse over time. You can also compare your changes to statewide changes to see if they are similar or different.

County results are graphed as grey bars and State results are graphed as black lines. Graphed survey results have "confidence intervals" displayed over the bars or lines. You can compare your data visually using confidence intervals. The true value in the population can be anywhere within those confidence interval "whiskers". If the confidence intervals do not overlap, the difference is considered "statistically significant". To compare differences in your local data over time, look at the grey confidence intervals on the bars to see if they overlap.

You can also compare if your local results are different from the state results, by checking to see if the confidence intervals on your County bars overlap with the confidence intervals on the State lines.

## Sample County Chart: Current cigar smoking



Only 1 data point for the state, so there is no line for the state results just the point estimate.

Both County and State results are shown with 95% confidence intervals (County grey I, State black I)

Confidence intervals can be used to compare either the County or State results over time, or to compare the County results to the State by year

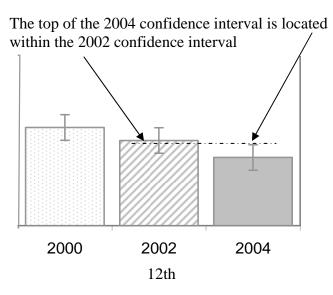
## **Comparing County Chart Results Over Time:**

The bottom of the 2000 confidence interval is slightly higher than the top of the 2004 confidence interval

2000 2002 2004

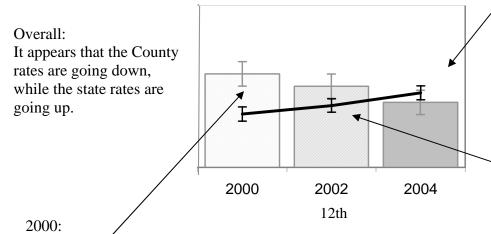
12th

*Interpretation*: There is a significant drop from 2000 to 2004.



Interpretation: There is NO significant change from 2002 to 2004.

## **Comparing County Results to State Results by Year**



The bottom of the County confidence interval is higher than the top of the 2000 State confidence interval.

*Interpretation:* The County was significantly higher than the State in 2000.

#### 2004:

The County and State confidence intervals are overlapping. *Interpretation*: There was no difference between the County and the State in 2004.

#### 2002:

It is difficult to see, but it looks like the County confidence interval is just above the State confidence interval. Use the data provided in the tables to determine if they really overlap. For this example the County 2002 is  $20.0\% \pm 3.0\%$  (17.0% to 23.0%) and the State 2002 is  $15.2\% \pm 1.6\%$  (13.6% to 16.8%). The low end of the County range, 17.0% is higher than the high end of the State range 16.8%.

*Interpretation*: The County was significantly higher than the state in 2002.

## **Tables:**

County and state trend data are provided in a table for 2000, 2002 and 2004 when data are available. Point estimates and 95% confidence intervals are reported. Confidence intervals in these tables may not exactly match confidence intervals reported in 2000 and 2002. Differences should be small and are the result of changes in rounding.

The relative change from 2000 to 2004 and the relative change from 2002 to 2004 are reported for each grade when available. The relative change is calculated by subtracting the newer result (2004) from the older result (2000 or 2002) and dividing by the older result. (I.e., if 6<sup>th</sup> grade cigarette smoking dropped from 2.6% in 2002 to 1.3% in 2004 the relative change is a 50% decrease. This is different than the absolute percentage point change which is a 1.3% decrease)

The results of a significance test (chi-square) on the change from 2000 to 2004 and the change from 2002 to 2004 are reported for each grade when available. "Yes" indicates that the changes is "statistically significant at the 95% confidence level" (that is, unlikely the result of just chance resulting from survey sampling methodology). Chi-square produces a more precise measurement than overlapping confidence intervals, so more significant differences may be detected than with the chart alone.

#### Sample Table: Current cigar smoking

County estimates and confidence intervals are provided for each grade and year available

<b>A</b>				
County	6th	8th	10th	12th
2000	$2.0\% \pm 1.0\%$	$15.0\% \pm 2.0\%$	$20.0\% \pm 2.0\%$	$23.0\% \pm 3.0\%$
2002	*	$13.0\% \pm 2.0\%$	$11.0\% \pm 2.0\%$	$20.0\% \pm 3.0\%$
2004	*	$8.0\% \pm 2.0\%$	$14.0\% \pm 2.0\%$	$16.0\% \pm 3.0\%$
	74			

2004	*	$8.0\% \pm 2.0\%$	$14.0\% \pm 2.0\%$	$16.0\% \pm 3.0\%$				
Overall Relative County Change from 2000 to 2004								
% change	*	47%	30%	31%				
Significance	*	yes	yes	no				
Relative County Change from 2002 to 2004								
% change	*	38%	-27%	20%				
Significance	*	yes	no	no				

Question not asked of 6<sup>th</sup> graders in 2002 and 2004.

State estimates and confidence intervals are provided for each grade and year available

State	6th	8th	10th	12th
2000	$1.5\% \pm 0.5\%$	$4.3\% \pm 1.0\%$	$7.9\% \pm 1.3\%$	$13.1\% \pm 1.8\%$
2002	*	$8.3\% \pm 1.4\%$	$11.4\% \pm 1.7\%$	$15.2\% \pm 1.6\%$
2004	*	$6.4\% \pm 1.2\%$	$11.4\% \pm 1.5\%$	$18.3\% \pm 1.7\%$

Overall Relative State Change from 2000 to 2004							
% change	*	-49%	-44%	-40%			
Significance	*	yes	yes	yes			
Relative State Change from 2002 to 2004							

Relative State Change from 2002 to 2004							
% change	*	23%	0%	-20%			
Significance	*	no	no	no			

## **Comparing Table Results Over Time:**

County	6th	8th	10th	12th
2000	$2.0\% \pm 1.0\%$	$15.0\% \pm 2.0\%$	$20.0\% \pm 2.0\%$	23.0% ± 3.0%
2002	*	$13.0\% \pm 2.0\%$	$11.0\% \pm 2.0\%$	20.0% ± 3.0%
2004	*	$8.0\% \pm 2.0\%$	$14.0\% \pm 2.0\%$	16.0% ± 3.0%
Overall Relati	ve County Change	from 2000 to 2004		
% change	*	47%	30%	31%
Significance	*	yes	yes	no
Relative Coun	ty Change from 200	02 to 2004		
% change	*	38%	-27%	20%
Significance	*	yes	no	no \

Results from a chi-square test are provided to identify changes over time that are statistically significant:

- YES = there is a statistically significant change, the p-value is less than 0.05
- NO = there is NOT a statistically significant change, the p-value is greater than 0.05

#### Interpretation:

Significant drops in current cigar smoking were seen in the County

- Among 8<sup>th</sup> and 10<sup>th</sup> graders from 2000 to 2004
- Among 8<sup>th</sup> graders from 2002 to 2004

Non-significant drops in current cigar smoking were seen in the County

- Among 12<sup>th</sup> graders from 2000 to 2004
- Among 12<sup>th</sup> graders from 2002 to 2004

A non-significant increase in current cigar smoking was seen in the County

• Among 10<sup>th</sup> graders from 2002 to 2004

Relative percent change from 2000 to 2004 provided.

Relative percent change from 2002 to 2004 provided

Relative percent change is calculated by subtracting the new rate from the previous rate and dividing by the previous rate. In this example, the relative change from 2002 to 2004 for  $12^{th}$  graders is (16%-20%)/20% = 20%.

Direction of change provided

- wrong direction is negative (-27%)
- correct direction is positive (20%)

In this example, we desire a decrease in the rate of cigar smoking so,

- the increase from 11% to 14% from 2002 to 2004 among 10<sup>th</sup> graders is a bad change, thus the relative change is a negative percent, –27%.
- the decrease from 20% to 16% is from 2002 to 2004 among 12<sup>th</sup> graders is a good change, thus the relative change is a positive percent, 20%.

# What if it looks like we are doing really badly (or surprisingly well) and I just know that's not true?

If you see something that appears surprising, please consider the following explanations:

- How stable are the estimates? If the confidence intervals are very wide, then although your results may appear 'worse' or 'better' when you look at them initially, there may not be enough statistical power to say for sure. Also, about 5% of the time, statistically, you will see something that looks significant but is really not.
- Did you have any programs in that goal area that had been fully implemented among enough people for long enough time? If you did not focus on secondhand smoke, for example, it would not be surprising to see no significant change in your data for these measures. If your programs were focused on a sub-set of the population, it is possible that these people do not represent enough of the overall population in the survey to contribute to results.
- Has anything else external to your program happened that could affect the overall population? For example, if shifts in the population (increased/decreased immigration/emigration) or in the community environment (economic changes, or changes in healthcare systems) occurred, these could impact your data. Also, national trends in tobacco control awareness, changes in the price of tobacco, and tobacco industry marketing may affect your results.

## What should I do with the information in this report?

We believe that these data will be useful to you for several purposes:

- Evaluation
  - Many of the measures included in this report are present in County strategic plan objectives. These results may indicate areas of strength where Counties are ready for more targeted activities or ready to implement policy, or areas of weakness where the Counties have room for improvement. For example, if your County did not see perceived youth access to tobacco, then this might be an area where program activities could focus. If you believe that you have had significant resources applied in any goal area, the results can be used *as one source of information* to evaluate the effectiveness of the activities in your strategic plan.
- Stakeholder Education
  - Results from the report can be used to generate interest or support among policymakers, community partners, program recipients or target audiences, and the general community. Results can be used in presentations, media releases, program materials, or as justification for key messages in any communications.

#### Need more information?

For more information about the results of these youth surveys or the findings in this report, please contact the Department of Health, Tobacco Prevention and Control Program – Assessment and Evaluation Team through your contract manager.

# Youth Data 2000, 2002 and 2004

(HYS/WSSAHB/TABS)

# **Report Findings**

# **Current Cigarette Smoking**

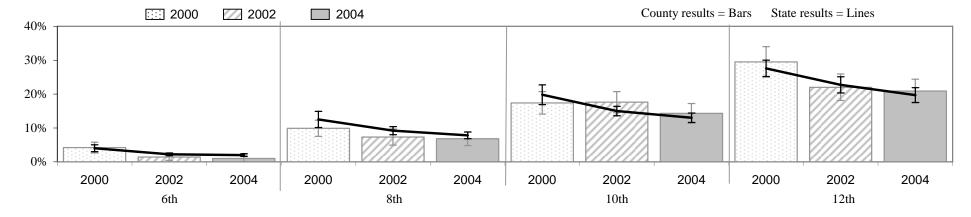
## **Survey Question and Significance**

Youth "current" cigarette smokers have used cigarettes at least once during the past 30 days. This is the national standard measure, and is different than the "current" measure for adults ("every day" or "some days"). The survey question is "During the past 30 days, on how many days did you smoke cigarettes?" Response options are: None, 1 - 2 days, 3 - 5 days, 6 - 9 days, 10 - 29 days, All 30 days.

Current smoking among youth is a long-term outcome for tobacco prevention programs. Cigarettes are by far the most popular tobacco product used by youth and historically the most likely for youth to remain addicted to as adults, thus cigarette smoking measures are considered to be the most important long-term measure for youth tobacco prevention programs. Well-funded, comprehensive programs could expect to see reductions in the prevalence of current youth smoking in 5-10 years.

#### **County and State Chart and Frequency Table**

The results displayed in this chart and table represent youth who reported smoking cigarettes on any number of days (1 to 30 days).



12th

County	0411	0411	10011	12411			
2000	$4.2\% \pm 1.6\%$ $9.9\% \pm 2.4\%$ 17		$17.4\% \pm 3.3\%$	29.5% ± 4.5%			
2002	$1.4\% \pm 1.0\%$	$7.3\% \pm 2.4\%$	$17.6\% \pm 3.1\%$	$22.0\% \pm 3.9\%$			
2004	$1.0\% \pm 1.0\%$	$6.8\% \pm 2.0\%$	$14.3\% \pm 2.9\%$	$20.9\% \pm 3.5\%$			
Overall Relative County Change from 2000 to 2004							
% change	76%	31%	18%	29%			
Significance	yes	yes	no	yes			
County Relativ	ve Change from 200	02 to 2004					
% change	29%	7%	19%	5%			
Significance	no	no	no	no			

8th

10th

State	6th	8th	10th	12th
2000	$4.0\% \pm 1.0\%$	$12.5\% \pm 2.4\%$	$19.8\% \pm 2.9\%$	$27.6\% \pm 2.4\%$
2002	$2.2\%\ \pm\ 0.4\%$	$9.2\% \pm 1.2\%$	$15.0\% \pm 1.4\%$	$22.7\% \pm 2.4\%$
2004	$2.0\% \pm 0.4\%$	$7.8\% \pm 1.0\%$	$13.0\% \pm 1.4\%$	$19.7\% \pm 2.2\%$

Overall Relative State Change from 2000 to 2004							
% change	50%	38%	34%	29%			
Significance	yes	yes	yes	yes			
State Relative Change from 2002 to 2004							
% change	9%	15%	13%	13%			
Significance	no	no	yes	no			

6th

County

relative % change: +% is a good change, -% is a bad change

yes = statistically significant (p = < 0.05)

Overall Relative State Change from 2000 to 2004

<sup>\*</sup> data not available see Missing Data on page 4

#### **Current Smokeless Tobacco Use**

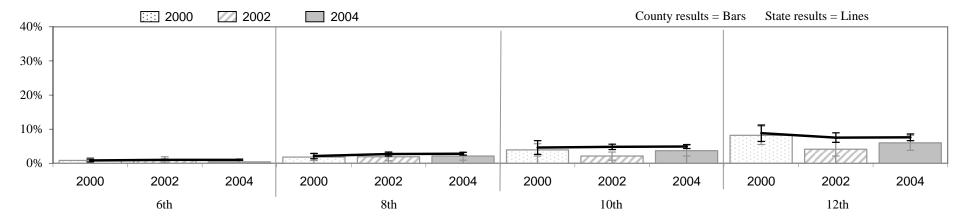
#### **Survey Question and Significance**

Youth "current" smokeless tobacco users have used some type of smokeless tobacco at least once during the past 30 days. This is the national standard measure, and is different than the "current" measure for adults ("every day" or "some days"). The survey question is "During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip?" Response options are: None, 1 - 2 days, 3 - 5 days, 6 - 9 days, 10 - 29 days, All 30 days.

Current smokeless tobacco (chew, dip, snuff) use among youth is a long-term outcome for tobacco prevention programs. As the prevalence of smokeless tobacco use is typically very low among youth overall, significant changes are more difficult to measure. Smokeless tobacco is addictive and may be of particular concern among males in rural areas. Well-funded comprehensive programs that include specialized focus on smokeless tobacco could expect to see reductions in the prevalence of current youth smokeless tobacco use in 5-10 years.

#### **County and State Chart and Frequency Table**

The results displayed in this chart and table represent youth who reported using smokeless tobacco on any number of days (1 to 30 days).



County	6th	8th	10th	12th	State	6th	8th	10th	12th
2000	$0.8\% \pm 0.8\%$	$1.8\% \pm 1.0\%$	$3.9\% \pm 1.8\%$	$8.2\% \pm 2.7\%$	2000	$0.8\% \pm 0.4\%$	$2.1\% \pm 0.8\%$	$4.6\% \pm 2.0\%$	$8.8\% \pm 2.4\%$
2002	$1.1\% \pm 0.8\%$	$1.9\% \pm 1.2\%$	$2.1\% \pm 1.2\%$	$4.1\% \pm 2.0\%$	2002	$1.0\% \pm 0.2\%$	$2.7\% \pm 0.6\%$	$4.8\% \pm 0.8\%$	$7.5\% \pm 1.4\%$
2004	$0.4\% \pm 0.6\%$	$2.1\% \pm 1.2\%$	$3.7\% \pm 1.6\%$	$6.0\% \pm 2.2\%$	2004	$1.0\% \pm 0.2\%$	$2.8\% \pm 0.4\%$	$4.9\% \pm 0.6\%$	$7.6\% \pm 1.0\%$
Overall Relative County Change from 2000 to 2004				Overall Relati	ve State Change fro	m 2000 to 2004			
% change	50%	-17%	5%	27%	% change	-25%	-33%	-7%	14%
Significance	no	no	no	no	Significance	no	no	no	no
County Relative Change from 2002 to 2004				State Relative	Change from 2002	to 2004			
% change	64%	-11%	-76%	-46%	% change	0%	-4%	-2%	-1%
Significance	no	no	no	no	Significance	no	no	no	no

<sup>\*</sup> data not available see Missing Data on page 4

relative % change: +% is a good change, -% is a bad change

yes = statistically significant (p=<0.05)

# **Current Cigar Smoking**

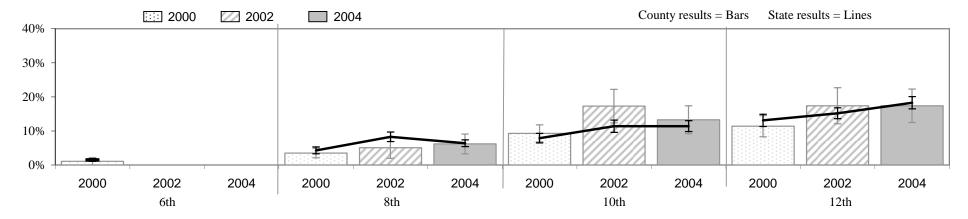
#### **Survey Question and Significance**

Current cigar smoking among youth is a long-term outcome for tobacco prevention programs. Cigar smoking has only recently been routinely included in youth surveys, and data indicate that a surprising number of youth report using cigars. Historically, cigars have been considered a novelty product and not as great a risk for lifetime addiction, but they could contribute to nicotine addiction and/or the culture of cigar smoking could be changing. Well-funded comprehensive programs that include specialized focus on cigar smoking could expect to see reductions in the prevalence of current cigar smoking in 5-10 years.

# **County and State Chart and Frequency Table**

Youth "current" cigar smokers have used cigars at least once during the past 30 days. This is the national standard measure, and is different than the "current" measure for adults ("every day" or "some days"). The survey question is "During the past 30 days, on how many days did you smoke cigars, cigarillos, or little cigars?" Response options: 0 days, 1 - 2 days, 3 - 9 days, 10 - 29 days, All 30 days.

The results displayed in this chart and table represent youth who reported smoking cigars on any number of days (1 to 30 days).



									_
County	6th	8th	10th	12th	State	6th	8th	10th	
2000	$1.1\% \pm 0.8\%$	$3.5\% \pm 1.4\%$	$9.3\% \pm 2.5\%$	$11.4\% \pm 3.1\%$	2000	$1.5\% \pm 0.4\%$	$4.3\% \pm 1.0\%$	$7.9\% \pm 1.4\%$	
2002	*	$5.1\% \pm 3.1\%$	$17.3\% \pm 4.9\%$	$17.4\% \pm 5.3\%$	2002	*	8.3% ± 1.4%	$11.4\% \pm 1.8\%$	Г
2004	*	$6.2\% \pm 2.9\%$	$13.3\% \pm 4.1\%$	$17.4\% \pm 4.9\%$	2004	*	$6.4\% \pm 1.0\%$	$11.4\% \pm 1.6\%$	
Overall Relative County Change from 2000 to 2004				Overall Relativ	ve State Change fro	om 2000 to 2004			
% change	*	-77%	-43%	-53%	% change	*	-49%	-44%	
Significance	*	no	no	yes	Significance	*	yes	yes	Γ
County Relativ	ve Change from 200	02 to 2004			State Relative	Change from 2002	to 2004		
% change	*	-22%	23%	0%	% change	*	23%	0%	Г
Significance	*	no	no	no	Significance	*	yes	no	T
<b>4</b> 1	111 34	D	1	0/ 1 .0/ '	1 1	2/ 1 1 1		11	

<sup>\*</sup> data not available see Missing Data on page 4

relative % change: +% is a good change, -% is a bad change

yes = statistically significant (p=<0.05)

12th 13.1% ± 1.8% 15.2% ± 1.6% 18.3% ± 1.8%

> -40% ves

> -20% yes

# Susceptibility to Tobacco Use

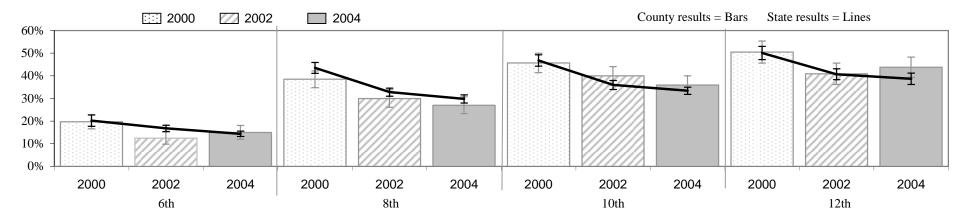
## **Survey Question and Significance**

Susceptibility is a combined measure using the questions "Do you think that you will smoke a cigarette anytime in the next year?" and "If one of your best friends offered you a cigarette, would you smoke it?" Response options: Definitely no, Probably no, Probably yes, Definitely yes.

'Susceptibility to tobacco use' is an intermediate outcome for tobacco prevention programs. Youth who are 'susceptible' are those who have not made a firm commitment not to smoke cigarettes. They may have smoked recently or in their lifetime, or they may not have, but their level of susceptibility predicts that given the opportunity or an accepting environment they may initiate smoking. This measure is created using a combination of two questions, and was developed by researchers in California<sup>1</sup>. Well-funded comprehensive programs that include multiple approaches for delivering anti-tobacco messages to youth could expect to see reductions in susceptibility to smoking among youth in 5 or more years.

#### **County and State Chart and Frequency Table**

The results displayed in this chart and table represent youth who are susceptible to tobacco use (did not respond "Definitely No" to both questions).



County	6th	8th	10th	12th
2000	$19.7\% \pm 3.1\%$	$38.5\% \pm 3.7\%$	$45.7\% \pm 4.3\%$	$50.5\% \pm 4.9\%$
2002	$12.5\% \pm 2.7\%$	30.0% ± 3.9%	40.0% ± 4.1%	40.9% ± 4.7%
2004	$15.0\% \pm 3.1\%$	$27.0\% \pm 3.7\%$	$35.9\% \pm 4.1\%$	$43.8\% \pm 4.5\%$

State	6th	8th	10th	12th
2000	$20.2\% \pm 2.5\%$	$43.5\% \pm 2.4\%$	$46.8\% \pm 2.5\%$	$50.1\% \pm 2.9\%$
2002	$16.8\% \pm 1.4\%$	$32.8\% \pm 1.8\%$	36.0% ± 2.0%	40.7% ± 2.4%
2004	$14.4\% \pm 1.2\%$	$29.8\% \pm 1.8\%$	33.4% ± 1.6%	$38.7\% \pm 2.5\%$

2001	13.070 ± 3.170	27.070 = 3.770	33.770 = 1.170	13.070 = 1.370					
Overall Relative County Change from 2000 to 2004									
% change	24%	30%	21%	13%					
Significance	yes	yes	yes	yes					
County Relativ	County Relative Change from 2002 to 2004								
% change	-20%	10%	10%	-7%					
Significance	no	no	no	no					

Significance	yes	yes	yes	yes				
State Relative Change from 2002 to 2004								
% change	14%	9%	7%	5%				
Significance	yes	yes	yes	no				

31%

relative % change: +% is a good change, -% is a bad change

% change

yes = statistically significant (p=<0.05)

29%

Overall Relative State Change from 2000 to 2004 29%

23%

<sup>\*</sup> data not available see Missing Data on page 4

<sup>&</sup>lt;sup>1</sup> Pierce JP, Gilpin EA, Farkas AJ, Merritt RK. "Validation of susceptibility as a predictor of which adolescents take up smoking in the United States" Health Psychology 19961;15(5):355-361

#### **Parent Discussions About Tobacco**

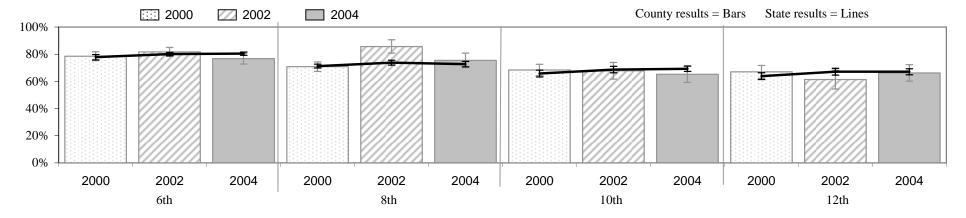
#### **Survey Question and Significance**

The survey question was "Has either of your parents discussed the dangers of tobacco use with you?" Response options were: Mother (or female guardian) only, Father (or male guardian) only, Both, Neither.

Parent discussions about tobacco are a short-term outcome for tobacco prevention programs. Parent communication of anti-tobacco values to youth is effective for reducing youth tobacco use if the parent is a non-tobacco user<sup>2</sup> and an important contribution to setting family norms that do not allow tobacco use. A youth is considered as 'having a discussion' if he or she talked about the dangers of tobacco use with one or both parents or guardians. Programs that dedicate significant effort to improving parent motivation and skills to deliver anti-tobacco messages to their children (which may include specialized support to help parents quit tobacco) could expect to see increases in parent discussions about tobacco in 3-5 years.

# **County and State Chart and Frequency Table**

The results displayed in this chart and table represent youth who discussed the dangers of tobacco use with either their Mother, Father, or Both.



County	otn	διn	10tn	12tn				
2000	$78.5\% \pm 3.3\%$	$70.9\% \pm 3.5\%$	$68.4\% \pm 4.1\%$	67.0% ± 4.7%				
2002	$81.7\% \pm 3.3\%$	85.7% ± 4.9%	$67.8\% \pm 6.1\%$	$61.3\% \pm 6.9\%$				
2004	$76.7\% \pm 3.9\%$	$75.5\% \pm 5.3\%$	$65.2\% \pm 5.9\%$	$66.2\% \pm 6.1\%$				
Overall Relative County Change from 2000 to 2004								
% change	-2%	6%	-5%	-1%				
Significance	no	no	no	no				
County Relativ	ve Change from 200	02 to 2004						
% change	-6%	-12%	-4%	8%				
Significance	no	yes	no	no				

State	6th	8th	10th	12th
2000	$77.8\% \pm 2.0\%$	$71.2\% \pm 1.4\%$	$65.8\% \pm 2.5\%$	$63.8\% \pm 2.5\%$
2002	$80.1\% \pm 1.2\%$	$73.8\% \pm 1.8\%$	$68.7\% \pm 2.4\%$	$67.1\% \pm 2.5\%$
2004	$80.4\% \pm 1.2\%$	$72.7\% \pm 2.0\%$	69.3% ± 2.0%	$67.1\% \pm 2.2\%$

	0							
% change	3%	2%	5%	5%				
Significance	yes	no	yes	no				
State Relative Change from 2002 to 2004								
% change	0%	-1%	1%	0%				
Significance	no	no	no	no				

Overall Relative State Change from 2000 to 2004

<sup>\*</sup> data not available see Missing Data on page 4

relative % change: +% is a good change, -% is a bad change

yes = statistically significant (p=<0.05)

# Youth Access to Tobacco is Very Hard

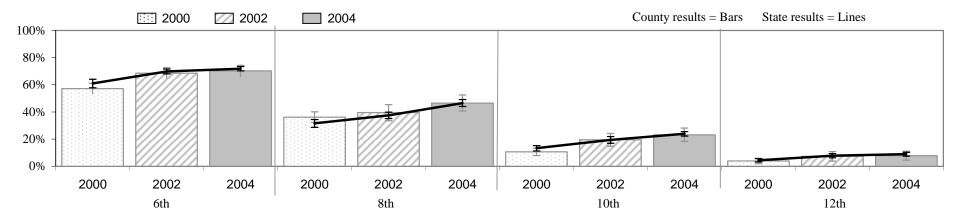
# **Survey Question and Significance**

The survey question is "If you wanted to get some cigarettes, how easy would it be for you to get some?" Response options: Very hard, Sort of hard, Sort of easy, Very easy.

Youth access to tobacco is a short-term outcome for tobacco prevention programs. Reducing youth access to tobacco is effective for reducing youth experimentation with tobacco use<sup>3</sup> and an important contributor to establishing community norms that do not allow tobacco use. Youth can obtain tobacco from a variety of sources, including stores (buying or stealing), parents (giving or stealing from smoking parents), friends, or strangers ('shoulder-tapping' outside of stores). Optimally, all youth not of legal age to buy tobacco products should report that it would be 'very hard' to get some cigarettes if they wanted some. Programs that dedicate significant effort to reduce youth access to tobacco from a variety of sources could expect to see increases in the proportion of youth who say it is 'very hard' to get tobacco in 3-5 years.

## **County and State Chart and Frequency Table**

The results displayed in this chart and table represent youth who reported access to cigarettes was "Very hard".



County	6th	8th	10th	12th	State	6th	8th	10th	12th
2000	57.2% ± 3.9%	36.2% ± 3.9%	$10.6\% \pm 2.7\%$	$3.9\% \pm 2.0\%$	2000	$61.0\% \pm 3.1\%$	31.6% ± 2.9%	$13.3\% \pm 2.0\%$	$4.4\% \pm 1.2\%$
2002	$68.6\% \pm 3.9\%$	39.5% ± 5.9%	19.5% ± 4.7%	$7.3\% \pm 3.5\%$	2002	69.8% ± 1.8%	$37.5\% \pm 2.4\%$	$19.4\% \pm 2.5\%$	$7.8\% \pm 1.6\%$
2004	$70.3\% \pm 4.1\%$	$46.6\% \pm 5.9\%$	$23.2\% \pm 4.9\%$	$7.8\% \pm 3.3\%$	2004	$71.9\% \pm 1.6\%$	$46.6\% \pm 2.5\%$	23.9% ± 1.6%	$8.9\% \pm 1.4\%$
Overall Relati	Overall Relative County Change from 2000 to 2004				Overall Relative State Change from 2000 to 2004				
% change	23%	29%	119%	100%	% change	18%	47%	80%	102%
Significance	yes	yes	yes	yes	Significance	yes	yes	yes	yes
County Relati	County Relative Change from 2002 to 2004				State Relative	Change from 2002	to 2004		
% change	2%	18%	19%	7%	% change	3%	24%	23%	14%
Significance	no	no	no	no	Significance	no	Ves	ves	no

<sup>\*</sup>data not available see Missing Data on page 4

relative % change: +% is a good change, -% is a bad change

yes = statistically significant (p=<0.05)

<sup>&</sup>lt;sup>3</sup> Centers for Disease Control and Prevention. Strategies for reducing exposure to environmental tobacco smoke, increasing tobacco-use cessation, and reducing initiation in communities and health-care systems, Hopkins personal communication, 2002.

# Youth Beliefs About Adults Opinions on Youth Smoking

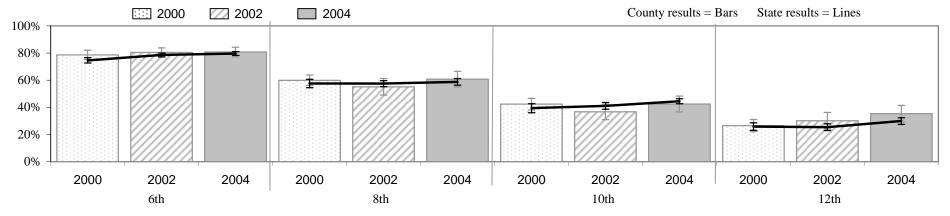
# **Survey Question and Significance**

The survey question is "How wrong would most adults in your neighborhood think it was for kids your age to smoke cigarettes?" Response options: Very wrong, Wrong, A little bit wrong, Not wrong at all.

The perception of adult's attitudes towards smoking is a short-term outcome for tobacco prevention programs. Establishing community no tobacco use norms contribute to increasing the perception that most adults think it is wrong for youth to smoke. Programs that dedicate significant efforts decreasing public smoking, tobacco advertising, and youth access to tobacco could expect to see increases in the proportion of youth who think adults think it is wrong for them to smoke in 3-5 years.

## **County and State Chart and Frequency Table**

The results displayed in this chart and table represent youth who reported adults think smoking cigarettes is "Very wrong".



County	6th	8th	10th	12th	State	6th	8th	10th	12th
2000	$78.7\% \pm 3.3\%$	59.9% ± 3.9%	$42.4\% \pm 4.3\%$	$26.6\% \pm 4.5\%$	2000	$74.6\% \pm 2.0\%$	57.6% ± 3.1%	39.4% ± 3.3%	$25.9\% \pm 2.7\%$
2002	$80.5\% \pm 3.3\%$	$55.1\% \pm 6.1\%$	36.7% ± 5.7%	$30.2\% \pm 6.1\%$	2002	$78.6\% \pm 1.4\%$	57.5% ± 2.2%	41.1% ± 2.5%	$25.4\% \pm 2.5\%$
2004	80.8% ± 3.5%	$60.8\% \pm 5.7\%$	$42.5\% \pm 5.9\%$	$35.4\% \pm 6.1\%$	2004	$79.7\% \pm 1.4\%$	$58.8\% \pm 2.4\%$	$44.5\% \pm 1.8\%$	29.9% ± 2.4%
Overall Relative County Change from 2000 to 2004				Overall Relati	ve State Change fro	om 2000 to 2004			
% change	3%	2%	0%	33%	% change	7%	2%	13%	15%
Significance	no	no	no	no	Significance	yes	no	yes	yes
County Relative Change from 2002 to 2004					State Relative	Change from 2002	to 2004		
% change	0%	10%	16%	17%	% change	1%	2%	8%	18%
Significance	no	no	no	no	Significance	no	no	ves	ves

<sup>\*</sup> data not available see Missing Data on page 4

relative % change: +% is a good change, -% is a bad change

yes = statistically significant (p=<0.05)

# Youth Beliefs about Someone Their Own Age Smoking

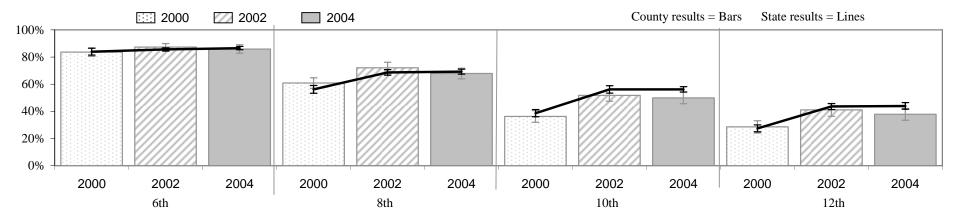
# **Survey Question and Significance**

The survey question is "How wrong do you think it is for someone your age to smoke cigarettes?" Response options: Very wrong, Wrong, A little bit wrong, Not wrong at all.

The perception of youth attitudes towards smoking is a short-term outcome for tobacco prevention programs. Youth who view smoking use as normative and who have friends who use or approve of the use of tobacco are more at risk for smoking<sup>4</sup>. Programs that dedicate significant effort to educate youth about the dangers of smoking and reinforce the norm that most youth do not smoke could expect to see increases in the proportion of youth who think smoking is wrong for other youth in 3-5 years.

# **County and State Chart and Frequency Table**

The results displayed in this chart and table represent youth who reported they think smoking cigarettes is "Very wrong"



				12th
2000	$83.6\% \pm 3.1\%$	$60.9\% \pm 3.9\%$	36.3% ± 4.3%	$28.6\% \pm 4.5\%$
2002	87.3% ± 2.7%	$72.1\% \pm 4.1\%$	$51.8\% \pm 4.3\%$	$41.1\% \pm 4.7\%$
2004	85.9% ± 3.1%	67.9% ± 3.9%	49.9% ± 4.3%	$37.8\% \pm 4.3\%$

Overall Relative County Change from 2000 to 2004							
% change	3%	11%	37%	32%			
Significance	no	yes	yes	yes			
County Relative Change from 2002 to 2004							

County Relative Change from 2002 to 2004							
% change	-2%	-6%	-4%	-8%			
Significance	no	no	no	no			
* 1 · · · · · 111 • • · · · · · · · · · ·							

State	6th	8th	10th	12th
2000	$84.0\% \pm 2.5\%$	$56.2\% \pm 2.9\%$	$38.7\% \pm 2.7\%$	$27.5\% \pm 2.5\%$
2002	85.6% ± 1.2%	$68.7\% \pm 2.0\%$	56.2% ± 2.7%	$43.6\% \pm 2.2\%$
2004	86.6% ± 1.2%	69.3% ± 1.8%	56.2% ± 2.0%	$44.0\% \pm 2.4\%$

Overall Relative State Change from 2000 to 2004										
% change	3%	23%	45%	60%						
Significance	no	yes	yes	yes						

State Relative Change from 2002 to 2004										
% change	1%	1%	0%	1%						
Significance	no	no	no	no						

relative % change: +% is a good change, -% is a bad change

yes = statistically significant (p = < 0.05)

<sup>\*</sup> data not available see Missing Data on page 4

<sup>&</sup>lt;sup>4</sup> U.S. Department of Health and Human Services. Preventing Tobacco Use Among Young People: A Report of the Surgeon General. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Disease Control & Prevention; 1994.

# Perceived Risk from Smoking a Few Cigarettes per Day

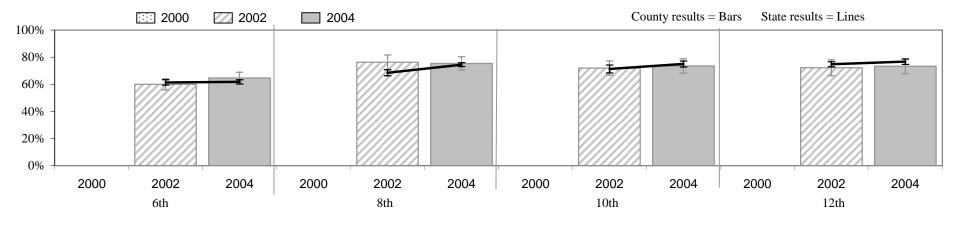
#### **Survey Question and Significance**

The survey question is "Do you think young people risk harming themselves if the smoke 1-5 cigarettes a day?" Response options: Definitely no, Probably no, Probably yes, Definitely yes.

Risk associated with smoking a few cigarettes per day is a short-term outcome for tobacco prevention programs. Youth who do not perceive a risk in using tobacco are at a higher risk to use it<sup>5</sup>. Programs that dedicate significant effort to educating youth about the risks of smoking could expect to see increases in the proportion of youth who say smoking a few cigarettes a day is definitely risky in 3-5 years.

# **County and State Chart and Frequency Table**

The results displayed in this chart and table represent youth who reported "Definitely yes" there is harm in smoking 1-5 cigarettes a day.



County	6th 8th		10th	<b>12th</b>	
2000	*	*	*	*	
2002	$60.0\% \pm 4.1\%$	$76.3\% \pm 5.3\%$	$72.0\% \pm 5.3\%$	$72.2\% \pm 5.9\%$	
2004	64.6% ± 4.3%	$75.4\% \pm 4.9\%$	$73.6\% \pm 5.3\%$	$73.3\% \pm 5.5\%$	

200.	01.070 = 1.570	73.170 = 1.270	73.070 = 3.370	73.370 = 3.370							
County Relative Change from 2002 to 2004											
% change	8%	-1%	2%	2%							
Significance	no	no	no	no							
ste 1	1 1 1 3 5 1 1	D	1	0/ 1 0/ 1							

State	te 6th 8th		10th	12th	
2000	*	*	*	*	
2002	$61.4\% \pm 2.0\%$	$68.5\% \pm 2.2\%$	$71.3\% \pm 2.9\%$	$74.8\% \pm 1.8\%$	
2004	$61.8\% \pm 1.6\%$	$74.5\% \pm 1.4\%$	$75.0\% \pm 2.2\%$	$76.7\% \pm 2.0\%$	

State Relative Change from 2002 to 2004											
% change 1% 9% 5% 3%											
Significance	no	yes	yes	no							

relative % change: +% is a good change, -% is a bad change

yes = statistically significant (p = < 0.05)

<sup>\*</sup> data not available see Missing Data on page 4

<sup>&</sup>lt;sup>5</sup> Arthur, M.W., Hawkins, J.D., Catalano, R.F., and Pollard, J.A. (1998). Students survey of risk and protective factors and prevalence of alcohol, tobacco, and other drug use. Seattle, WA: social Development Research Group.

# Perceived Risk from Smoking a Pack or More of Cigarettes per Day

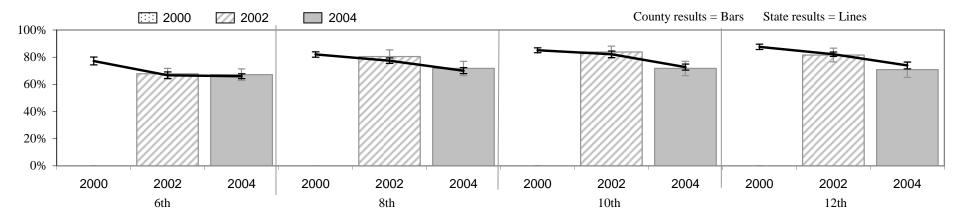
#### **Survey Question and Significance**

The survey question is "How much do you think people risk harming themselves if they smoke one or more packs of cigarettes per day?" Response options: Very No risk, Slight risk, Moderate risk, Great risk, Not sure.

Risk associated with smoking a pack or more of cigarettes is a short-term outcome for tobacco prevention programs. Youth who do not perceive a risk in using tobacco are at a higher risk to use it<sup>6</sup>. Programs that dedicate significant effort to educating youth about the risks of smoking could expect to see increases in the proportion of youth who say there is great risk in smoking a pack or more of cigarettes a day in 3-5 years.

### **County and State Chart and Frequency Table**

The results displayed in this chart and table represent youth who reported there is "Great risk" in smoking a pack or more a day.



County	6th	8th	10th	12th	State	6th
2000	*	*	*	*	2000	$77.2\% \pm 2.9\%$
2002	$67.8\% \pm 3.9\%$	80.5% ± 4.9%	83.8% ± 4.3%	81.6% ± 5.1%	2002	$66.7\% \pm 2.4\%$
2004	67.1% ± 4.3%	$71.7\% \pm 5.3\%$	$71.7\% \pm 5.3\%$	$70.8\% \pm 5.7\%$	2004	66.0% ± 1.8%
Overall Relativ	ve County Change	from 2000 to 2004			Overall Relati	ve State Change fr
% change	*	*	*	*	% change	-15%
Significance	*	*	*	*	Significance	yes
County Relativ	ve Change from 200	02 to 2004			State Relative	Change from 2002
% change	-1%	-11%	-14%	-13%	% change	-1%
Significance	no	yes	yes	yes	Significance	no

Overall Kelati	Weran Relative State Change Holli 2000 to 2004										
% change	-15%	-15%	-15%	-16%							
Significance	yes	yes	yes yes								
State Relative Change from 2002 to 2004											
% change	-1%	-9%	-10%								

yes

8th

 $82.0\% \pm 2.0\%$ 

 $77.4\% \pm 2.0\%$ 

 $70.1\% \pm 2.2\%$ 

go from 2000 to 2004

relative % change: +% is a good change, -% is a bad change

yes = statistically significant (p=<0.05)

10th

 $85.1\% \pm 1.8\%$ 

 $82.1\% \pm 2.4\%$ 

 $72.7\% \pm 2.2\%$ 

ves

12th

 $87.6\% \pm 2.0\%$ 

 $82.2\% \pm 1.6\%$ 

 $73.9\% \pm 2.5\%$ 

<sup>\*</sup> data not available see Missing Data on page 4

<sup>&</sup>lt;sup>6</sup> Arthur, M.W., Hawkins, J.D., Catalano, R.F., and Pollard, J.A. (1998). Students survey of risk and protective factors and prevalence of alcohol, tobacco, and other drug use. Seattle, WA: social Development Research Group.

# Perceived "Coolness" Associated with Smoking Cigarettes

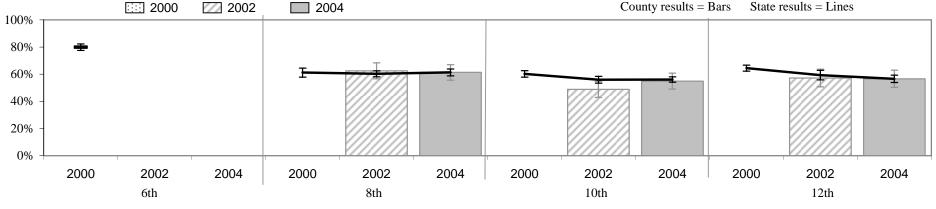
# **Survey Question and Significance**

The survey question is "What are the changes you would be seen as cool if you smoked cigarettes?" Response options: No or very little chance, Little chance, Some chance, Pretty good chance, Very good chance.

Perceived "coolness" associated with smoking cigarettes is a short-term outcome for tobacco prevention programs. Youth who believe that they will be favorably perceived as a result of engaging in cigarette smoking are more likely to smoke. Youth who smoke are more likely to believe that smokers are more socially adept than nonsmokers. Programs that dedicate significant effort to debunking the myth that smoking cigarettes will improve social standing could expect to see increases in the proportion of youth who believe smoking is not seen as cool in 3-5 years.

#### **County and State Chart and Frequency Table**

The results displayed in this chart and table represent youth who reported there is "No or very little chance" they would be seen as cool if they smoked.



County	6th	8th	10th	12th	State	6th	8th	10th	12th
2000	*	*	*	*	2000	$79.9\% \pm 2.4\%$	$61.2\% \pm 3.3\%$	$60.2\% \pm 2.4\%$	64.5% ±
2002	*	62.5% ± 5.9%	$48.8\% \pm 5.9\%$	57.2% ± 6.5%	2002	*	$60.3\% \pm 2.2\%$	$55.9\% \pm 2.5\%$	59.3% ±
2004	*	$61.3\% \pm 5.7\%$	54.9% ± 5.9%	56.6% ± 6.3%	2004	*	$61.3\% \pm 2.5\%$	56.1% ± 2.0%	56.6% ± 2
Overall Relati	ve County Change	from 2000 to 2004			Overall Relati	ve State Change fro	om 2000 to 2004		
% change	*	*	*	*	% change	*	0%	-7%	-12%
Significance	*	*	*	*	Significance	*	no	yes	yes
County Relativ	ve Change from 20	02 to 2004			State Relative	Change from 2002	to 2004		
% change	*	-2%	13%	-1%	% change	*	2%	0%	-5%
Significance	*	no	no	no	Significance	*	no	no	no

<sup>\*</sup> data not available see Missing Data on page 4

relative % change: +% is a good change, -% is a bad change

yes = statistically significant (p=<0.05)

<sup>&</sup>lt;sup>7</sup> Arthur, M.W., Hawkins, J.D., Catalano, R.F., and Pollard, J.A. (1998). Students survey of risk and protective factors and prevalence of alcohol, tobacco, and other drug use. Seattle, WA: SDRG

<sup>&</sup>lt;sup>8</sup> Starr G, Rogers T, Schooley M, Porter S, Wiesen E, Jamison N. Key Outcome Indicators for Evaluation Compressive Tobacco Control Programs. Atlanta, GA: Centers for Disease Control and Prevention; 2005, p.93.

# **Tobacco Industry Influence ~ Youth Who Received Tobacco Marketing Merchandise**

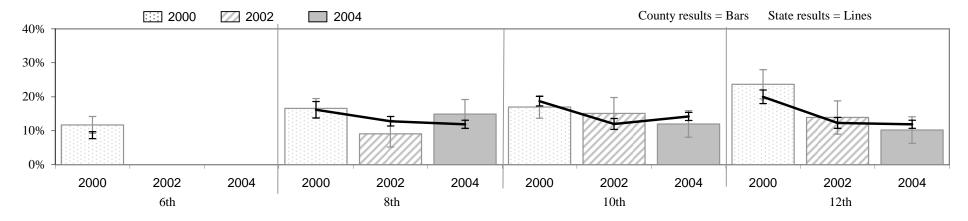
## **Survey Question and Significance**

The survey question is "Some tobacco companies make items like sports gear, t-shirts, lighters, hats, jackets, and sunglasses that people can buy or receive for free. During the past 12 months, did you buy or receive anything that has a tobacco company name or picture on it?" Response options: No or Yes.

Exposure and acceptance of tobacco marketing merchandise is a short-term outcome for tobacco prevention programs. Some studies have shown that youth who approve of tobacco advertising and identify with its images are more likely to start smoking<sup>9</sup>. Programs that dedicate significant efforts to reducing youth exposure or acceptance to tobacco marketing (raising awareness and limiting sampling or promotional events, media literacy training) could expect to see reductions in the proportion of youth who say they bought or received something with tobacco company advertising on it in 3-5 years.

# **County and State Chart and Frequency Table**

The results displayed in this chart and table represent youth who reported "Yes" they bought or received something.



State

County	6th	8th	10th	12th						
2000	$11.7\% \pm 2.5\%$	$16.6\% \pm 2.9\%$	$17.0\% \pm 3.3\%$	$23.7\% \pm 4.3\%$						
2002	*	$9.1\% \pm 3.9\%$	$15.1\% \pm 4.7\%$	13.9% ± 4.9%						
2004	* $14.9\% \pm 4.3\%$ $12.0\% \pm 3.9\%$ $10.2\% \pm 3.9\%$									
Overall Relative County Change from 2000 to 2004										

2000	$11.7\% \pm 2.5\%$	$16.6\% \pm 2.9\%$	$17.0\% \pm 3.3\%$	$23.7\% \pm 4.3\%$	2000	$8.7\% \pm 1.0\%$	$16.2\% \pm 2.4\%$	$18.7\% \pm 1.4\%$	$20.0\% \pm 2.0\%$
2002	*	$9.1\% \pm 3.9\%$	$15.1\% \pm 4.7\%$	13.9% ± 4.9%	2002	*	$12.8\% \pm 1.4\%$	$12.0\% \pm 1.6\%$	$12.3\% \pm 1.6\%$
2004	*	14.9% ± 4.3%	$12.0\% \pm 3.9\%$	$10.2\% \pm 3.9\%$	2004	*	11.9% ± 1.2%	$14.2\% \pm 1.2\%$	$11.9\% \pm 1.2\%$
Overall Relativ	ve County Change t	from 2000 to 2004			Overall Relativ	ve State Change fro	om 2000 to 2004		

% change	*	10%	29%	57%				
Significance	*	no	no	yes				
County Relativ	County Relative Change from 2002 to 2004							
% change	*	-64%	21%	27%				
Significance	*	no	no	no				

% change	*	27%	24%	41%				
Significance	*	yes	yes	yes				
State Relative Change from 2002 to 2004								
0/ 1	ale.	70/	1.00/	20/				

8th

10th

6th

\* data not available see Missing Data on page 4

12th

<sup>7%</sup> -18% 3% % change Significance no no no yes = statistically significant (p=<0.05) relative % change: +% is a good change, -% is a bad change

Starr G, Rogers T, Schooley M, Porter S, Wiesen E, Jamison N. Key Outcome Indicators for Evaluation Compressive Tobacco Control Programs. Atlanta, GA: Centers for Disease Control and Prevention; 2005, p.76.

# **Resistance to Pro-Tobacco Marketing Items**

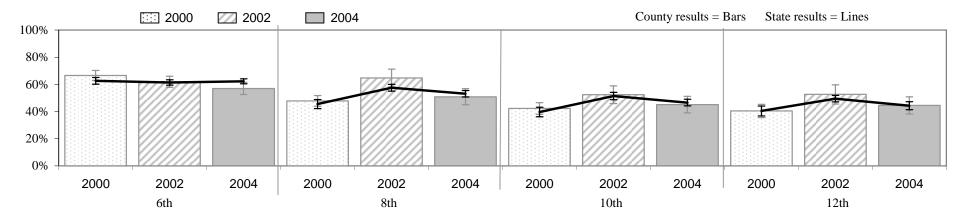
#### **Survey Question and Significance**

The survey question is "Would you ever use or wear something that has a tobacco company name or picture on it such as a lighter, t-shirt, hat, or sunglasses?" Response options: Definitely no, Probably no, Probably yes, Definitely yes.

Resistance to pro-tobacco marketing is an intermediate outcome for tobacco prevention programs. Evidence to support a causal relationship between resistance to pro-tobacco marketing and tobacco prevention is limited; however research has found that tobacco media literacy increases youth empowerment and other measures considered to predict youth prevention 10. Youth who report that they would "definitely not" use or wear a tobacco industry promotional item are considered resistant to pro-tobacco marketing. Programs that dedicate significant efforts to reducing youth exposure or acceptance to tobacco marketing (raising awareness and limiting sampling or promotional events, media literacy training) could expect an increase in resistance to pro-tobacco marketing in 3-5 years.

#### **County and State Chart and Frequency Table**

The results displayed in this chart and table represent youth who reported "Definitely No" they would not use tobacco marketing items.



County	6th	8th	10th	12th
2000	$66.6\% \pm 3.7\%$	$47.8\% \pm 3.9\%$	$42.3\% \pm 4.3\%$	$40.4\% \pm 4.9\%$
2002	$61.9\% \pm 4.1\%$	$64.7\% \pm 6.5\%$	$52.4\% \pm 6.5\%$	52.6% ± 7.1%
2004	$57.0\% \pm 4.5\%$	50.9% ± 5.9%	$45.1\% \pm 6.1\%$	$44.5\% \pm 6.3\%$
Overall Relativ	ve County Change	from 2000 to 2004		

Overall Relative County Change from 2000 to 2004							
% change	-14%	6%	7%	10%			
Significance	yes	no	no	no			
County Relative Change from 2002 to 2004							
% change	-8%	-21%	-14%	-15%			

ves

no

State	6th	8th	10th	12th
2000	$62.6\% \pm 2.5\%$	$45.5\% \pm 3.3\%$	$39.7\% \pm 3.5\%$	$40.4\% \pm 3.7\%$
2002	$61.4\% \pm 2.0\%$	57.5% ± 2.5%	51.4% ± 2.7%	49.5% ± 2.4%
2004	62.3% ± 1.8%	53.1% ± 2.4%	46.6% ± 2.4%	44.3% ± 2.9%

Overall Relative State Change from 2000 to 2004							
% change	0%	17%	17%	10%			
Significance	no	yes	yes	no			
State Relative Change from 2002 to 2004							

State Relative Change from 2002 to 2004							
% change	1%	-8%	-9%	-11%			
Significance	no	yes	yes	yes			

Significance

relative % change: +% is a good change, -% is a bad change

yes = statistically significant (p = < 0.05)

no \* data not available see Missing Data on page 4

<sup>&</sup>lt;sup>10</sup> Bruce Pinkleton, Erica Austin, Marilyn Cohen, and Autumn Miller, "Media Literacy and Smoking Prevention Among Adolescents: A Year-Two Evaluation of the American Legacy Foundation/Washington State Department of Health Anti-Tobacco Campaign," Paper presented at the International Communication Association, Health Communication Division, San Diego, California, May 2003.

# **Exposure to Secondhand Smoke in Home/Car**

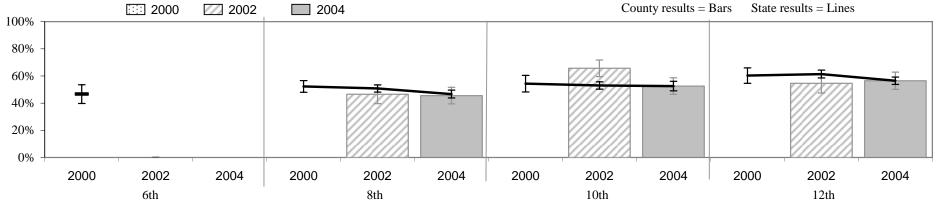
# **Survey Question and Significance**

Exposure to SHS is a combined measure using the questions "During the past 7 days, on how many days were you in the same room with someone who was smoking cigarettes?" and "During the past 7 days, on how many days did you ride in a car with someone who was smoking cigarettes?"

Exposure to secondhand smoke for youth is an intermediate outcome for secondhand smoke reduction programs. Youth are most likely to be exposed to secondhand smoke in home environments (including family cars), in contrast to adults (who may also be exposed in the workplace). Creating secondhand smoke bans in homes and cars is effective to reducing exposure to secondhand smoke 11 and also may improve quitting success among smokers who are trying to quit 12. Programs that dedicate significant effort to increasing awareness, motivation and skills to establish home and car bans – particularly in homes with youth – could expect to see reductions in exposure to secondhand smoke for youth in 3-5 years.

#### **County and State Chart and Frequency Table**

The results displayed in this chart and table represent youth who reported being exposed to SHS on any number of days (1-7 days) in a room or a car.



County	6th	8th	10th	12th	State	6th	8th	10th	12th
2000	*	*	*	*	2000	$46.7\% \pm 6.9\%$	$52.3\% \pm 4.3\%$	54.4% ± 6.1%	$60.3\% \pm 5.7\%$
2002	*	46.6% ± 6.9%	$65.7\% \pm 6.1\%$	54.6% ± 7.1%	2002	*	$50.8\% \pm 2.7\%$	$53.0\% \pm 2.7\%$	$61.4\% \pm 2.9\%$
2004	*	$45.5\% \pm 6.1\%$	$52.5\% \pm 6.1\%$	56.5% ± 6.3%	2004	*	46.7% ± 2.9%	$52.5\% \pm 3.5\%$	$56.5\% \pm 2.7\%$
Overall Relati	ve County Change	from 2000 to 2004			Overall Relati	ve State Change fro	om 2000 to 2004		
% change	*	*	*	*	% change	*	11%	3%	6%
Significance	*	*	*	*	Significance	*	yes	no	no
County Relative Change from 2002 to 2004					State Relative	Change from 2002	to 2004		
% change	*	2%	20%	-3%	% change	*	8%	1%	8%
Significance	*	no	yes	no	Significance	*	yes	no	yes

<sup>\*</sup> data not available see Missing Data on page 4

relative % change: +% is a good change, -% is a bad change

yes = statistically significant (p=<0.05)

<sup>&</sup>lt;sup>11</sup> Centers for Disease Control and Prevention. Strategies for reducing exposure to environmental tobacco smoke, increasing tobacco-use cessation, and reducing initiation in communities and health-care systems. A report on recommendations of the Task Force on Community Preventive Services. MMWR 2000;49(No. RR-12)

<sup>&</sup>lt;sup>12</sup> B A Pizacani, D P Martin, M J Stark, T D Koepsell, B Thompson, and P Diehr, A prospective study of household smoking bans and subsequent cessation related behaviour: the role of stage of change, Tob Control, Mar 2004;13:23-28

#### Perceived Risk from Secondhand Smoke

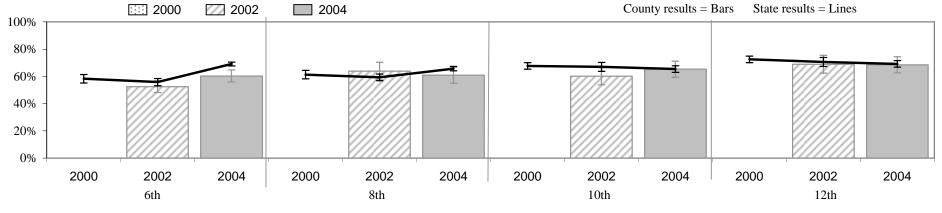
# **Survey Question and Significance**

The survey question is "Do you think the smoke from other people's cigarettes (secondhand smoke) is harmful to you?" Response options: Definitely no, Probably no, Probably yes, Definitely yes.

Risk associated with secondhand smoke is a short-term outcome for tobacco prevention programs. Increased knowledge of the adverse health effects of secondhand smoke is associated with increased efforts by individuals to minimize their exposure to secondhand smoke and with reductions in actual exposure <sup>13</sup>. Programs that dedicate significant efforts to increasing youth knowledge about the dangers of secondhand smoke could expect to see increases in the proportion of youth who think secondhand smoke is definitely harmful in 3-5 years.

#### **County and State Chart and Frequency Table**

The results displayed in this chart and table represent youth who reported "Definitely yes" secondhand smoke is harmful.



County	6th	8th	10th	12th	State	6th	8th	10th	12th
2000	*	*	*	*	2000	$58.3\% \pm 3.1\%$	$61.3\% \pm 3.1\%$	$67.7\% \pm 2.4\%$	$72.5\% \pm 2.4$
2002	$52.5\% \pm 4.3\%$	$63.9\% \pm 6.5\%$	$60.1\% \pm 6.3\%$	$68.9\% \pm 6.5\%$	2002	$55.8\% \pm 2.7\%$	59.3% ± 2.4%	67.0% ± 3.3%	$70.6\% \pm 3.3$
2004	$60.3\% \pm 4.5\%$	$60.9\% \pm 5.9\%$	$65.3\% \pm 5.9\%$	$68.5\% \pm 5.9\%$	2004	$69.1\% \pm 1.4\%$	$65.7\% \pm 1.6\%$	$65.4\% \pm 2.4\%$	$69.2\% \pm 2.4$
Overall Relati	ve County Change	from 2000 to 2004			Overall Relati	ive State Change fro	om 2000 to 2004		
% change	*	*	*	*	% change	19%	7%	-3%	-5%
Significance	*	*	*	*	Significance	yes	yes	no	no
County Relative Change from 2002 to 2004					State Relative	Change from 2002	to 2004		
% change	15%	-5%	9%	-1%	% change	24%	11%	-2%	-2%
Significance	ves	no	no	no	Significance	ves	ves	no	no

<sup>\*</sup> data not available see Missing Data on page 4

relative % change: +% is a good change, -% is a bad change

yes = statistically significant (p=<0.05)

<sup>13</sup> Starr G, Rogers T, Schooley M, Porter S, Wiesen E, Jamison N. Key Outcome Indicators for Evaluation Compressive Tobacco Control Programs. Atlanta, GA: Centers for Disease Control and Prevention; 2005, p.127.

# **Community Prevalence of Smoking**

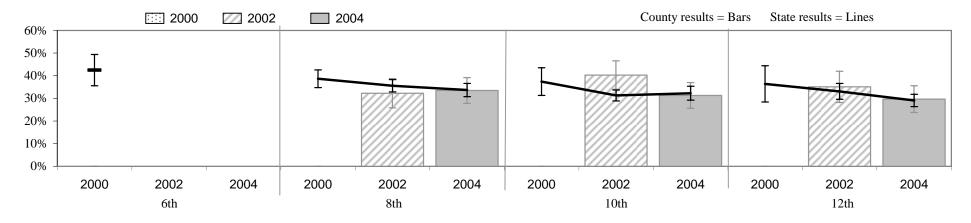
# **Survey Question and Significance**

The survey question is "Does anyone who lives with you now smoke cigarettes?" Response options: Yes, or No.

Community tobacco use reported on the Healthy Youth Survey is related to the intermediate outcome for tobacco prevention programs 'community norms around tobacco' and is also a proxy for the long-term cessation outcome of adult prevalence of smoking (validating results from the BRFSS or other adult surveys). Well-funded comprehensive programs that seek to reduce smoking among adults with youth could expect to see reductions in community prevalence of smoking as reported by youth in 5-10 years.

#### **County and State Chart and Frequency Table**

The results displayed in this chart and table represent youth who reported someone they live with smokes cigarettes.



County	6th	8th	10th	12th						
2000	*	*	*	*						
2002	*	$32.3\% \pm 6.5\%$	$40.3\% \pm 6.3\%$	$35.1\% \pm 6.9\%$						
2004	*	$33.5\% \pm 5.7\%$	$31.3\% \pm 5.7\%$	29.7% ± 5.9%						
Overall Relativ	Overall Relative County Change from 2000 to 2004									
% change	*	*	*	*						
Significance	*	*	*	*						
County Relative Change from 2002 to 2004										
% change	*	-4%	22%	15%						
Significance	*	no	ves	no						

State	6th	8th	10th	12th
2000	$42.5\% \pm 6.9\%$	$38.7\% \pm 3.9\%$	$37.4\% \pm 6.1\%$	$36.4\% \pm 8.0\%$
2002	*	$35.6\% \pm 2.7\%$	$31.3\% \pm 2.4\%$	33.1% ± 3.5%
2004	*	33.7% ± 2.9%	32.3% ± 3.1%	29.1% ± 2.7%

Overall Relative State Change from 2000 to 2004									
% change	*	13%	14%	20%					
Significance	*	no	no	no					
State Relative	State Relative Change from 2002 to 2004								
% change	*	5%	-3%	12%					
Significance	*	no	no	no					

relative % change: +% is a good change, -% is a bad change

yes = statistically significant (p = < 0.05)

<sup>\*</sup> data not available see Missing Data on page 4

# **Prevention in Schools ~ Access to Substance Counseling**

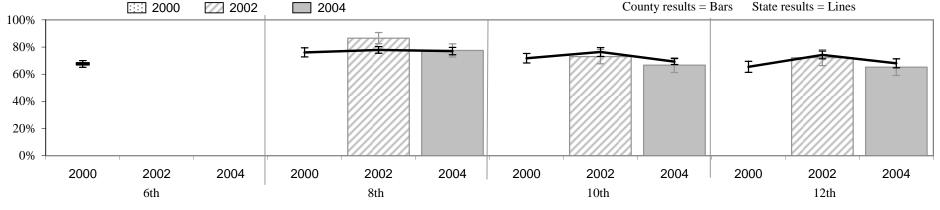
#### **Survey Question and Significance**

The survey question is "Does your school provide a counselor, intervention specialist, or other school staff member for students to discuss problems with alcohol, tobacco or other drugs?" Response options: No, Yes, I'm not sure.

Providing access to substance use counseling is a short-term outcome for school-based tobacco prevention programs. Although it is possible to quit using tobacco without help, evidence shows that the chance of success is much higher with the use of support services <sup>14</sup>. Before youth can access services they need to know that they are available. Programs that dedicate significant efforts to providing youth prevention and counseling services and promoting their availability could expect to see increases in the proportion of youth who are aware of the services in 3-5 years.

#### **County and State Chart and Frequency Table**

The results displayed in this chart and table represent youth who reported "Yes" their school provides a counselor to discuss substance use problems.



County	6th	8th	10th	12th	State	6th	8th	10th	121
2000	*	*	*	*	2000	$67.6\% \pm 5.9\%$	$76.1\% \pm 3.3\%$	$71.7\% \pm 3.5\%$	65.4% ±
2002	*	86.6% ± 4.1%	$73.0\% \pm 5.3\%$	$72.2\% \pm 5.9\%$	2002	*	$77.9\% \pm 2.4\%$	$76.4\% \pm 3.3\%$	74.2% ±
2004	*	$77.5\% \pm 4.9\%$	66.7% ± 5.5%	$65.2\% \pm 6.1\%$	2004	*	$77.1\% \pm 2.7\%$	69.3% ± 2.2%	68.0% ±
Overall Relative County Change from 2000 to 2004					Overall Relative State Change from 2000 to 2004				
% change	*	*	*	*	% change	*	1%	-3%	4%
Significance	*	*	*	*	Significance	*	no	no	no
County Relative Change from 2002 to 2004				State Relative	Change from 2002	to 2004			
% change	*	-11%	-9%	-10%	% change	*	-1%	-9%	-8%
Significance	*	yes	no	no	Significance	*	no	yes	yes

<sup>\*</sup> data not available see Missing Data on page 4

relative % change: +% is a good change, -% is a bad change

yes = statistically significant (p=<0.05)

Starr G, Rogers T, Schooley M, Porter S, Wiesen E, Jamison N. Key Outcome Indicators for Evaluation Compressive Tobacco Control Programs. Atlanta, GA: Centers for Disease Control and Prevention; 2005, p.197.

# **Prevention in Schools ~ Developing Refusal Skills**

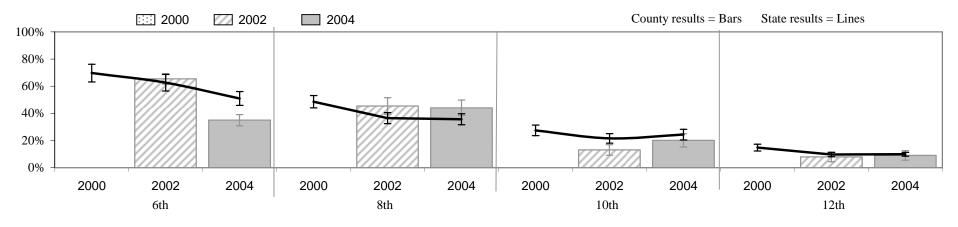
# **Survey Question and Significance**

The survey question is "During the past year did you practice ways to say NO to tobacco in any of your classes (for example, by role playing)?" Response options: Yes. No. Not sure.

The development of tobacco refusal skills is a short-term outcome for school-based tobacco prevention programs. Comprehensive school programs should include instruction that develops behavioral skills for resisting social influences that promote tobacco use, such as refusal skills.<sup>15</sup> Programs that dedicate significant efforts to providing opportunities for practicing tobacco refusal skills could expect to see increases in the proportion of youth who "say no" to tobacco in class in 3-5 years.

#### **County and State Chart and Frequency Table**

The results displayed in this chart and table represent youth who reported "Yes" they practiced saying no to tobacco in class in the past year.



County	6th	8th	10th	12th	State	6th	8th	10th	12th
2000	*	*	*	*	2000	$69.7\% \pm 6.5\%$	$48.6\% \pm 4.5\%$	$27.5\% \pm 3.9\%$	$14.8\% \pm 2.5\%$
2002	$65.4\% \pm 3.9\%$	$45.4\% \pm 6.1\%$	$13.1\% \pm 3.9\%$	$7.9\% \pm 3.5\%$	2002	$62.6\% \pm 6.1\%$	$36.5\% \pm 4.1\%$	21.6% ± 3.5%	$9.7\% \pm 1.6\%$
2004	$35.0\% \pm 4.1\%$	44.1% ± 5.7%	$20.1\% \pm 4.9\%$	$9.0\% \pm 3.5\%$	2004	$51.0\% \pm 5.1\%$	$35.7\% \pm 4.1\%$	24.4% ± 3.9%	$9.9\% \pm 1.4\%$
Overall Relat	ive County Change	from 2000 to 2004			Overall Relati	ive State Change fro	om 2000 to 2004		
% change	*	*	*	*	% change	-27%	-27%	-11%	-33%

Significance	*	*	*	*	Significance	yes	yes	no	yes
County Relative Change from 2002 to 2004				State Relative Change from 2002 to 2004					
% change	-46%	-3%	53%	14%	% change	-19%	-2%	13%	2%
Significance	ves	no	ves	no	Significance	ves	no	no	no

<sup>\*</sup> data not available see Missing Data on page 4

relative % change: +% is a good change, -% is a bad change

yes = statistically significant (p=<0.05)

-33%

<sup>&</sup>lt;sup>15</sup> Centers for Disease Control and Prevention. Guidelines for school health programs to prevent tobacco use and addiction. MMWR 1994;43(No. RR-2):[

# **Prevention in Schools ~ Tobacco Curriculum Implementation**

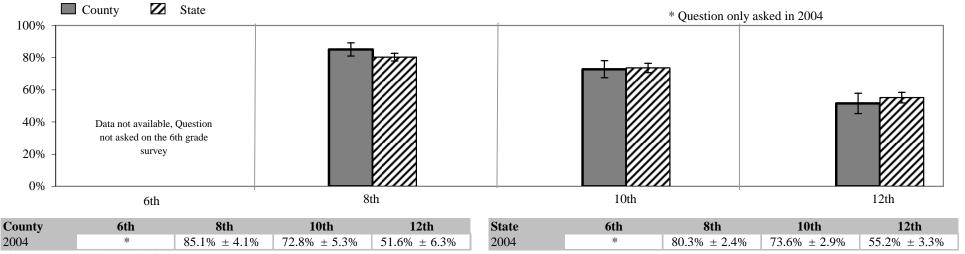
# **Survey Question and Significance**

The survey question is "During the past year in school, how many times did you get information in classes about the dangers of tobacco use?" Response options: None, Once, 2 or 3 times, 4 or more times.

Tobacco prevention curriculum implementation in classes is a short-term outcome for school-based tobacco prevention programs. Evidence suggests that programs that include instruction on the short- and long-term negative physiologic and social consequences of tobacco use, social influences on tobacco use, peer norms, and life skills can prevent or reduce tobacco use among students. Programs that establish the use of tobacco prevention curriculum in classes could expect to see increases in the proportion of youth receiving information about the dangers of tobacco in 3-5 years.

# **County and State Chart and Frequency Table**

The results displayed in this chart and table represent youth who reported receiving any information about the dangers of tobacco use in the past year ("Once", "2 or 3 times", and "4 or more times").



<sup>\*</sup> data not available see Missing Data on page 4

<sup>&</sup>lt;sup>16</sup> Starr G, Rogers T, Schooley M, Porter S, Wiesen E, Jamison N. Key Outcome Indicators for Evaluation Compressive Tobacco Control Programs. Atlanta, GA: Centers for Disease Control and Prevention; 2005, p.46.

#### Perceived Enforcement of Tobacco-Free School Policies

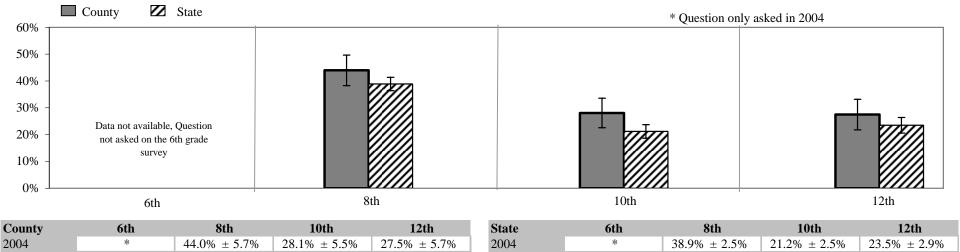
# **Survey Question and Significance**

The survey question is "Do you think that rules about not using tobacco at your school are usually enforced?" Response options: Definitely no, Probably no, Probably yes, Definitely yes.

The perceived enforcement of tobacco-free school policies is a short-term outcome for tobacco prevention programs. Clearly articulated school policies, applied fairly and consistently, can help students decide not to use tobacco.<sup>17</sup> Perceived compliance with tobacco-free policies is one measure of actual compliance with these policies. If tobacco-free policies are not observed, they are not likely to be effective in changing social norms or inhibiting tobacco use among young people <sup>18</sup>. Programs that dedicate significant efforts to consistently enforce of tobacco-free school policies could expect to see increases in the perception of tobacco policy enforcement among youth in 3-5 years

## **County and State Chart and Frequency Table**

The results displayed in this chart and table represent youth who reported "Definitely yes" rules about not using tobacco are usually enforced.



<sup>\*</sup> data not available see Missing Data on page 4

<sup>&</sup>lt;sup>17</sup> Centers for Disease Control and Prevention. Guidelines for school health programs to prevent tobacco use and addiction. MMWR 1994;43(No. RR-2):

<sup>&</sup>lt;sup>18</sup> Starr G, Rogers T, Schooley M, Porter S, Wiesen E, Jamison N. Key Outcome Indicators for Evaluation Compressive Tobacco Control Programs. Atlanta, GA: Centers for Disease Control and Prevention; 2005, p.58.

# **Use of Tobacco on School Property**

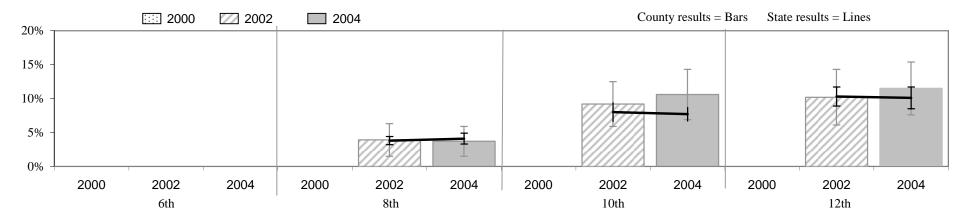
# **Survey Question and Significance**

The survey question is "During the past 30 days, on how many days did you use tobacco (cigarettes, cigars, chew/dip) on school property?" Response options: 0 days, 1 - 2 days, 3 - 9 days, 10 - 29 days, All 30 days.

Use of tobacco on school property is a short-term outcome for tobacco prevention programs. Eliminating tobacco use on school property is effective for reducing youth experimentation with tobacco use <sup>19</sup> and an important contributor to establishing school norms that do not allow tobacco use. School policies to restrict tobacco use should follow model policies provided by DOH that provide communication of policies, consistent enforcement of policies, and supportive consequences for policy infractions. Programs that dedicate significant effort to implement strong school-based tobacco prevention policies could expect reductions in use of tobacco on school property in 3-5 years.

#### **County and State Chart and Frequency Table**

The results displayed in this chart and table represent youth who reported using tobacco on school property on any number of days (1 to 30 days).



County	6th	8th	10th	12th
2000	*	*	*	*
2002	*	$3.9\% \pm 2.4\%$	$9.2\% \pm 3.3\%$	$10.2\% \pm 4.1\%$
2004	*	$3.7\% \pm 2.2\%$	$10.6\% \pm 3.7\%$	11.5% ± 3.9%

2004		$3.770 \pm 2.270$	$10.0\% \pm 3.7\%$	11.5% ± 5.9%				
County Relative Change from 2002 to 2004								
% change	*	5%	-15%	-13%				
Significance	*	no	no	no				

State	6th	8th	10th	12th
2000	*	*	*	*
2002	*	$3.8\% \pm 0.6\%$	$8.0\% \pm 1.4\%$	$10.3\% \pm 1.4\%$
2004	*	$4.1\% \pm 0.8\%$	$7.7\% \pm 1.0\%$	10.1% ± 1.6%

State Relative Change from 2002 to 2004							
% change	*	-8%	4%	2%			
Significance	*	no	no	no			

relative % change: +% is a good change, -% is a bad change

<sup>\*</sup> data not available see Missing Data on page 4

yes = statistically significant (p = < 0.05)

<sup>&</sup>lt;sup>19</sup> Recommendations based on a comprehensive review of published research related to school policy implementation, Effectiveness of School Policies for Tobacco Prevention, Unpublished. DOH 2002